

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (original) An isolated polynucleotide encoding a first antibody at least 95%, at least 96%, at least 97%, at least 98%, at least 99%, or at least 100% identical to a second antibody comprising an amino acid sequence selected from the group consisting of:

- (a) at least one CDR region of a VH domain of the antibody expressed by a hybridoma cell line selected from the group consisting of: XF3.5F1, XF11.1F8, XF3.6A2, XF3.10B8, XF22.3C9.6, XF22.9E6, XF27/28.7D5, XF27/28.18B5, XF27/28.25G10, XF27/28.36A12, XF27/28.36F11, and XF27/28.43E2;
- (b) at least two CDR regions of a VH domain of the antibody expressed by a hybridoma cell line selected from the group consisting of: XF3.5F1, XF11.1F8, XF3.6A2, XF3.10B8, XF22.3C9.6, XF22.9E6, XF27/28.7D5, XF27/28.18B5, XF27/28.25G10, XF27/28.36A12, XF27/28.36F11, and XF27/28.43E2;
- (c) at least three CDR regions of a VH domain of the antibody expressed by a hybridoma cell line selected from the group consisting of: XF3.5F1, XF11.1F8, XF3.6A2, XF3.10B8, XF22.3C9.6, XF22.9E6, XF27/28.7D5, XF27/28.18B5, XF27/28.25G10, XF27/28.36A12, XF27/28.36F11, and XF27/28.43E2;
- (d) at least one CDR region of a VL domain of the antibody expressed by a hybridoma cell line selected from the group consisting of: XF3.5F1, XF11.1F8, XF3.6A2, XF3.10B8, XF22.3C9.6, XF22.9E6, XF27/28.7D5, XF27/28.18B5, XF27/28.25G10, XF27/28.36A12, XF27/28.36F11, and XF27/28.43E2;
- (e) at least two CDR regions of a VL domain of the antibody expressed by a hybridoma cell line selected from the group consisting of: XF3.5F1, XF11.1F8, XF3.6A2, XF3.10B8, XF22.3C9.6, XF22.9E6, XF27/28.7D5,

XF27/28.18B5, XF27/28.25G10, XF27/28.36A12, XF27/28.36F11, and XF27/28.43E2; and

- (f) at least three CDR regions of a VL domain of the antibody expressed by a hybridoma cell line selected from the group consisting of: XF3.5F1, XF11.1F8, XF3.6A2, XF3.10B8, XF22.3C9.6, XF22.9E6, XF27/28.7D5, XF27/28.18B5, XF27/28.25G10, XF27/28.36A12, XF27/28.36F11, and XF27/28.43E2.

2-60 (canceled)

61. (new) An isolated antibody or fragment thereof comprising the amino acid sequence of the VH domain of SEQ ID NO:60 and the amino acid sequence of the VL domain of SEQ ID NO:62.

62. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof is selected from the group consisting of a whole immunoglobulin molecule, an scFv, a Fab fragment, an Fab' fragment, an F(ab')₂, an Fv, and a disulfide linked Fv.

63. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof is monoclonal.

64. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof is chimeric or humanized.

65. (new) The antibody or fragment thereof of claim 61 which comprises a heavy chain immunoglobulin constant domain.

66. (new) The antibody or fragment thereof of claim 65 wherein said heavy chain immunoglobulin constant domain is selected from the group consisting of an IgM

constant domain, an IgG1 constant domain, an IgG2 constant domain, an IgG3 constant domain, an IgG4 constant domain and an IgA constant domain.

67. (new) The antibody or fragment thereof of claim 66 wherein said heavy chain immunoglobulin constant domain is human.

68. (new) The antibody or fragment thereof of claim 67 wherein said heavy chain immunoglobulin constant domain is a human IgG4 constant domain.

69. (new) The antibody or fragment thereof of claim 61 which comprises a light chain immunoglobulin constant domain.

70. (new) The antibody or fragment thereof of claim 69 which comprises a light chain immunoglobulin constant domain selected from the group consisting of a kappa constant domain and a lambda constant domain.

71. (new) The antibody or fragment thereof of claim 70 wherein said light chain immunoglobulin constant domain is human.

72. (new) The antibody or fragment thereof of claim 61 which comprises a human IgG4 heavy chain immunoglobulin constant domain and a human kappa chain immunoglobulin constant domain.

73. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof is coupled or conjugated to a detectable label.

74. (new) The antibody or fragment thereof of claim 73, wherein the detectable label is a radiolabel.

75. (new) The antibody or fragment thereof of claim 74, wherein the radiolabel is ^{125}I , ^{131}I , ^{111}In , ^{90}Y , ^{99}Tc , ^{177}Lu , ^{166}Ho , or ^{153}Sm .

76. (new) The antibody or fragment thereof of claim 73, wherein the detectable label is an enzyme, a fluorescent label, a luminescent label, or a bioluminescent label.

77. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof is biotinylated.

78. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof is attached to a solid support.

79. (new) An isolated cell or cell line that produces the antibody or fragment thereof of claim 61.

80. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof inhibits the binding of HIV virus to CCR5 expressing cells.

81. (new) The antibody or fragment thereof of claim 61 wherein the antibody or fragment thereof inhibits the ability of HIV virus to infect CCR5 expressing cells.

82. (new) The XF11.1D8 hybridoma cell line deposited under ATCC Deposit Accession Number PTA-3030.

83. (new) The antibody produced by the XF11.1D8 hybridoma cell line of claim 82.

84. (new) A method of detecting expression of a G-protein Chemokine Receptor (CCR5) polypeptide comprising:

(a) assaying the expression of a G-protein Chemokine Receptor (CCR5) polypeptide in a biological sample from an individual using the antibody of claim 61; and

(b) comparing the level of a G-protein Chemokine Receptor (CCR5) polypeptide with a standard level of a G-protein Chemokine Receptor (CCR5) polypeptide.